

# LONGENECKER and ASSOCIATES

## EXPERIENCE SUMMARIES FOR KEY PERSONNEL

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### James J. Zach

#### EXPERIENCE SUMMARY:

Mr. Zach has 38 years experience in the nuclear power industry and the US Department of Energy (DOE) complex. His experience includes managing large technical projects and operations of nuclear power utilities that are regulated by the US Nuclear Regulatory Commission (NRC). In various assignments Mr. Zach has demonstrated strong management and communication skills; the ability to effectively interact with subordinate staff (both union and professional personnel), federal regulators, and customers (US NRC and DOE); participate in decision-making with other industry leaders, and operate in a regulated environment with multiple tasks with several different stakeholders.

Specifically, Mr. Zach directly supervised staffs of 4 to 15 managers with ultimate responsibility of up to several hundred employees. As discussed in detail below, in the various management positions he was responsible for budgeting, training (using the nuclear power industry as a template), records management to comply with state and Federal regulations, operations, industrial safety, community relations, project management, nuclear safety, maintenance, radiological protection (compliance with 10 CFR 20 and As Low As Reasonably Achievable), and chemistry.

#### DETAILED EXPERIENCE:

##### Independent Contractor

1996-2007

Mr. Zach worked on the Yucca Mountain Project in three tasks in 2007: helping Quality Assurance clear some of their backlog with respect to procedure updates, reviewing Analysis Model Reports in anticipation of their submittal for the Total System Performance Assessment, and an assessment of engineering processes and products of the Management and Operations Contractor and the Las Vegas Office of DOE.

During 2006, Mr. Zach worked on the Yucca Mountain Project facilitating the creation of the Lead Laboratory concept, specifically with respect to the Quality Assurance function. One of his duties was to create the Quality Assurance Requirements Matrix, including providing necessary logic when the Lead Laboratory was not implementing some of the Quality Assurance Requirements and Description. As in other tasks, Mr. Zach effectively interacted with prime contractor personnel, the customer (US DOE), and subcontractors.

In 2005 Mr. Zach helped Savannah River Site submit documentation to the NRC to facilitate their decision to concur with a Department of Energy waste disposal approach.

From 1999 through 2004, Mr. Zach was at Hanford where he researched the flammable gas issue for inactive miscellaneous facilities as part of the process for closing the flammable gas USQ for those facilities. Mr. Zach actively participated in the development of the Documented Safety Analysis (DSA) to comply with 10 CFR 830. This included not only being responsible for several chapters, but also serving as peer reviewer for other documents. He co-authored the document leading to the successful resolution of the last high level safety issue (flammable gas) and removing the last tanks from the Watch List. The result was the meeting of a Tri-Party Agreement milestone. He was a qualified USQ reviewer.

During 1997-1999, Mr. Zach served Ontario Power Generation (OPG) at its head office in Toronto, assisting in performance assessments of their nuclear operations and in implementing

a performance improvement program. He was a member of a team which evaluated the operation, maintenance, health physics, chemistry, QA, licensing training, and instrumentation and control at each of three sites with 20 units. He played a key role in successful conduct of a regulatory commitment reconciliation project at Ontario Power, completing this important project on schedule and under budget, and assisting OPG in their transition to a new regulatory regime.

In early 1999, Mr. Zach participated in an NRC-sponsored assessment of the Millstone Nuclear Power Station. The unit had been shut down because of regulatory concerns and had completed its recovery plan. The assessment was to determine whether the plant had made adequate progress in addressing the concerns.

In 1996 Mr. Zach was at Hanford where he resolved a long-standing item open with the Defense Nuclear Facilities Safety Board. He researched the potential for lightning striking the waste storage tanks and proposed an acceptable, cost-effective corrective action.

### **New York Power Authority**

1994-1996

Mr. Zach has nuclear operating management experience, which includes serving as Operations General Manager for Indian Point 3 Nuclear Power Plant where he managed more than 100 professionals and was responsible for operational safety, system engineering, outage management, chemistry, and health physics. He was instrumental in the recovery from an extended regulatory/maintenance outage, including assuring all US NRC concerns were addressed.

### **Independent Contractor**

1993

In 1993 Mr. Zach was the team leader for the accreditation of a training program at DOE's Savannah River Site. This involved the initial evaluation of the program, recommendations for corrective actions, reviewing changes, and drafting the Contractor Self Evaluation Report. The program he was instrumental in developing was one of two to be accredited across the DOE complex.

### **Wisconsin Electric Power Company**

1969-1992

From 1990-1992, Mr. Zach served as Vice President for Nuclear Power at Wisconsin Electric Power Company. He was the officer-in-charge responsible for overall operations, safety, engineering, quality assurance, and licensing of the Point Beach Nuclear Plant which consists of two 500 MWe pressurized water reactors. Mr. Zach managed a staff of more than 300 engineers, operators, and technicians.

Mr. Zach was involved in various industry activities including being on the Electric Power Research Institute's Steam Generator Owners' Group Executive Committee. He was also a member of another utility's nuclear safety board at a time when the utility was considering, developing, and implementing standardized technical specifications. He actively participated in the US NRC's transition in its approach to nuclear power plant operator training and licensing.

As the Manager of the Point Beach Nuclear Plant from 1982 to 1990, he had full responsibility for overall operations, safety, engineering and licensed activities, employee labor relations, media interface, and community relations. During this time the steam generators in one unit were replaced and most of the "TMI" modifications/changes were implemented including control room upgrades, new instrumentation, computer replacement, training program accreditation, and major refurbishments of secondary plant equipment replacement were undertaken and accomplished. These changes were made to the satisfaction of the US NRC with minimal impact on plant operation, including no outage caused by the mandated changes. This was also the time of significant changes in the fitness-for-duty rules and facility security.

From 1969-1982, Mr. Zach served as General Superintendent/Superintendent of Reactor

Engineering for Wisconsin Electric Power Company where he directed operations, maintenance, and technical support on the nuclear site. Under his direction, the site's emergency plan transitioned to compliance with the new regulatory requirements of the time. He was issued a Senior Reactor Operator license by the US NRC for the two-unit plant. From 1969-1979, Mr. Zach was head of the plant-engineering group responsible for on-site fuel management and reactor performance. As such he was centrally involved in the initial startup of the two units and the annual refueling/maintenance outages.

**EDUCATION:**

- BS Mechanical Engineering, University of Nebraska – Lincoln: 1969
- INPO Senior Nuclear Executive Seminar: 1991
- Utility Executive Management Courses, University of Michigan: 1989, 1991

**PROFESSIONAL ASSOCIATIONS:**

- Registered Professional Engineer – Wisconsin
- American Nuclear Society